Centerville Tree Board Recommendations for Tree Pruning

Pruning is an art, not an exact science. Even though there are principles, guidelines, and steps to prune correctly, there is not always just one 'best way' to prune a tree or shrub. There can be many different 'good ways' to prune. Even similar trees and shrubs may need to be pruned differently. Unfortunately, trial and error is usually the best teacher. Be comforted, plants are forgiving, many pruning mistakes may corrected, or at least minimized, within a year or two: however, some cannot; so, take time to learn some of the basic pruning principles before you start.

Many home gardeners make the mistake of planting a tree, then neglecting it for several years until it begins to become a problem, or until it begins to bear fruit. They are reluctant to prune because they aren't sure how to prune, or they are afraid of injuring their plants. *However, no pruning can be just as bad for plants as incorrect pruning.*

Pruning is one of the most important tasks you need to do in your yard, but it is one that is often neglected or forgotten. Take time to learn the correct principles of pruning, and then practice regularly. A good way to learn how to prune is to take a pruning class; the USU extension service teaches several pruning classes each year. You could also watch a video, or buy a book about pruning. Pruning books can be a great investment to have as a reference to fall back on as you encounter new pruning questions and situations; a picture is worth a thousand words.

Once you learn the basics, its time to get started and to practice. Don't wait until next year, 'when you will have more time', **or** 'when you will know more about pruning', **or** 'when the tree cannot wait any longer".

Reasons For Pruning

Thin fruit crops

Strengthen plants

Rejuvenate old plants

Stimulate new growth

Control size (height and width)

Shape trees (important for new trees)

Remove unsightly branches (dead or broken)

Remove potential insect and disease problems

Reduce risk of failure

Provide clearance

Reduce shade and wind resistance

Maintain health

Influence flower or fruit production

Improve a view

Improve aesthetics

Do's and Don'ts of Pruning

1. Cut branches on a 45 degree angle with the top towards the bud or branch you want to become the leader. Do not cut on too steep of an angle. Stay 1/8" away from the bud. Pruning on an angle allows water to drain off the surface, and helps the cut heal.

- 2. Cut close to a bud, cross branch, or crotch. Don't ever leave a stub.
- 3. Don't cut too close to the bud or trunk, or you may damage the tissue. Stay 1/16" away from the top of the branch and 1/8" away from the bottom.
 - **4.** Hold pruners right-side up while cutting close to the trunk, to avoid leaving a stub.
- **5.** Make clean cuts. Don't leave ragged edges on a branch, or strip bark from the plant. If needed, use a knife to make a smooth edge out of a ragged cut. Ragged cuts take longer to heal than clean cuts.
 - **6.** Use the three cut method to remove large limbs.
- 1. Make the first cut three to six inches from the trunk. Saw up through the branch 1/3 of the way or until the weight of the branch begins to bind the saw blade.
 - 2. Make the second cut one or two inches further away from the trunk than the first cut. Saw from the top until the branch falls off the tree.
 - 3. Make the third cut next to the tree, following all the correct pruning procedures.
- 7. Pruning paint, or tree seal, does not necessarily help the tree heal. Trees and shrubs have natural ways of healing and sealing cuts. One reason to apply a pruning paint is for cosmetic reasons and is not recommended in most cases.. Another reason is for the reduction of borer attack.
- **8. Do not ever "Top" a tree.** Prune and shape the tree regularly to prevent the need for drastic pruning. (*Learn about 'Drop-Crotch Pruning' as an alternative to 'Topping'*)
- **9**. Prune to control the direction of new growth. The top bud is always the dominant leader. Pruning determines which bud will become the leader.
 - **10.** Try to thin the branches and to open up the tree rather than to create a dense canopy.
- 11. Diseases can be easily transmitted by pruning equipment. Sterilize pruning equipment before moving from one tree to another. If your tree already has a disease, make sure to sterilize your equipment between every cut, so you don't spread the disease to other parts of the tree.
- 12. Fertilize trees, but reduce the amount of fertilizer if you are trying to reduce the tree's size, or if you want to slow down its growth. Reducing the amount of water also slows growth.
 - 13. Prune trees twice a year if needed. 'Summer Pruning' can be very effective.

A basic rule of thumb: 'Dormant Pruning' (early in the spring) stimulates a lot of new, vigorous growth.

'Summer Pruning' does not stimulate excessive new growth; it actually helps to slow down new growth. It also helps prevents 'suckering'.

Large Branch Pruning

If a large limb needs to be removed, its weight should be reduced first. To prevent tearing the bark and trunk, particularly in the case of larger branches, follow the 'Three Cut' procedure.

- Cut #1. Cut a small notch in the bottom of the limb, 3 inches to 3 feet away from the trunk, and about a quarter of the way up. This notch will keep the bark from splitting or tearing away in the trunk, when you make the next cut.
- Cut #2. Just outside the first cut, make a second cut completely through the branch. This removes the weight of the branch, so that you can make your final cut without the bark tearing, the branch splitting, or damaging the main trunk.
- Cut #3. Final Cut: This is the one that matters the most. Your final cut should be right where the branch collar (the swollen bump) transitions to smooth bark. Follow the slant of the branch collar. If you can't fit your saw into the crotch at the right angle, then cut it from the bottom up.

Cutting the Branch Too Short: The branch collar is responsible for forming the scar tissue. If you cut into the branch collar, the tree will have a very hard time recovering. When you see rotten holes in tree trunks (hollow logs), or seeping wounds, you're looking at the results of cutting too close to the trunk.

Leaving the Branch Too Long: The branch collar on the trunk can only do its job, of allowing the wound to heal, if all of the branch that it has to cover has been removed, while leaving the branch collar itself intact.

If you fail to remove most of the weight of the limb before trimming the branch, you run the risk of having the branch split. This split can cause substantial damage to the trunk. This can also make the wound on the trunk more susceptible to disease and insect infestation, and it may not let the wound heal properly.

Steps of Pruning

- **1.** Remove all Dead, Broken, or Diseased branches. (no choice, they have to go)
- 2. Remove crossing or parallel branches (leave the best one).
- 3. Remove branches or twigs growing too close together. (try to space them equally)
- **4.** Remove branches that grow back toward the center of the tree. These limit the light that reaches the fruit. Fruit that receives sunlight is more flavorful than fruit that is shaded. (Cherries at the top of your tree, the ones that the birds eat, are bigger and sweeter than the cherries you eat from the middle of the tree.)
- **5.** Remove branches with weak crotches (smaller than 45 degrees or larger than 90 degrees). If a branch with a weak crotch must remain, either brace it, or train the branch to form a stronger crotch angle.
- **6.** Remove all suckers (water sprouts) as soon as you see them; anytime of the year. If you are trying to correct, or restore a tree's shape, you may need to leave a sucker, but make sure to head it back so it is only about 12" to 18" long. Do not ever leave a sucker it's full length.
- 7. Remove a few of the main branches of the tree each year if you need to thin the tree, or if you want to lower the height of the tree. Do not remove more than one-third of the total tree in one year. Take two or three years to reduce the tree size rather than trying to do it all in one year. Always 'Drop Crotch' your tree: don't ever 'Top' your tree!
- **8.** Thin and shape the tree as required to maintain a sustainable trunk and branch arrangement. The way you prune may vary according to the type of tree, and location of the tree. Structural pruning is used on young and mediumaged trees to establish a dominant central trunk, resistant to high velocity winds and heavy snow loading on branches.
- 9. Stand back and look at your tree. Ask yourself, "What should the tree look like?" and, "What do I want the tree to look like?" and, "What strength can I enhance to help this tree withstand a strong, canyon wind?" Hopefully the answers to all of these questions is the same.
- **10.** If the plant is too dense, remove a few of the branches to 'open it up', but make sure the plant is uniform. If the plant is too tall or too wide, thin some of the branches part way back, but keep the plant uniform.
- 11. Stand back and look again. What has changed? Does it look better or worse? Repeat this step until you are satisfied with the results.

Definitions:

Thinning Cuts. Completely removes entire stems, limbs or branches. Thinning allows sunlight to reach the center of the plant. Thinning also redirects energy to the remaining branches, instead of stimulating new growth, side shoots, or suckers; it maintains the natural apical dominance in the branch.

Heading Cuts. Partially removes stems and branches. Pruning cuts are in the middle of branches, next to side branches, or next to buds that will direct the new growth the way you want it. Heading cuts promote thicker branching, which produces a fuller canopy. They can have a tendency to stimulate suckering, unless a dominant leader is left; it removes any natural apical dominance the branch previously had.

Shearing Cuts. Removes as much of the branches and stems as desired. You make indiscriminate pruning cuts on all branches and stems, not taking into consideration any side branches or buds. Shearing should only be used for hedges, and shrubs, where dense, thick branching and foliage is desired.

Pinching. One of the easiest "cuts" to make, you simply pinch off a bud with your thumb and forefinger. Pinching stops the stem from elongating and encourages bushy growth. It's effective for directing growth on small shrubs and pine trees, to give the plant an even-looking shape.